

PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF US 40 AND WOODBRIDGE WAY/BUSINESS CENTER WAY IN HARFORD COUNTY. THE WORK IS NECESSITATED BY RESURFACING AND MEDIAN CONSTRUCTION ALONG US 40. US 40 IS ASSUMED TO RUN IN A EAST-WEST DIRECTION. WORK WILL CONSIST OF REPLACING DETECTION AND SIGNAL HEADS AND INSTALLING A PEDESTRIAN PHASE ACROSS THE WEST LEG OF US 40.

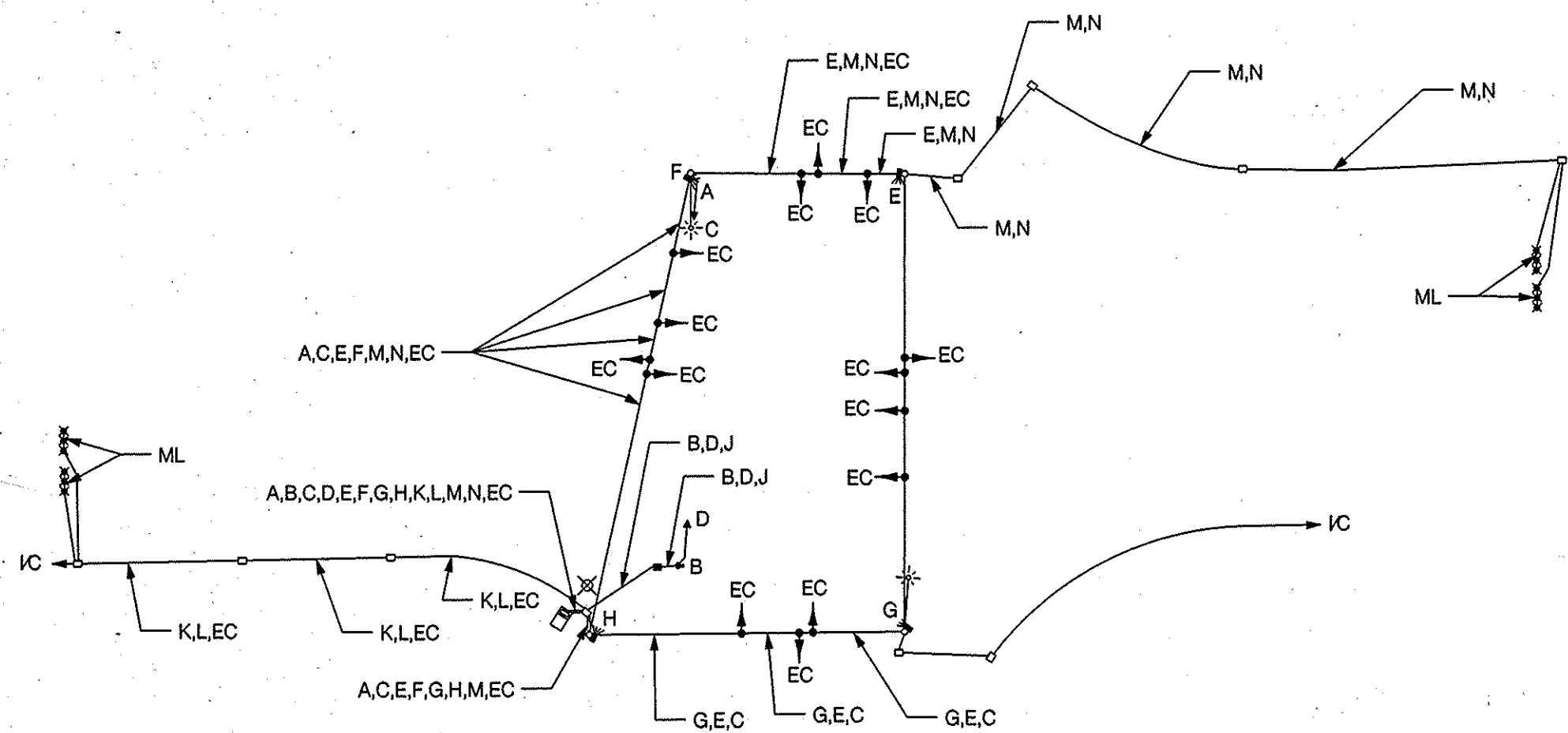
INTERSECTION OPERATION

THE INTERSECTION CURRENTLY OPERATES IN A NEMA SIX-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH EXCLUSIVE LEFT TURN PHASING FOR US 40 AND SIDE STREET SPLIT PHASING. AN ALTERNATE PEDESTRIAN PHASE FOR THE WEST LEG OF US 40 WILL BE ADDED.

CONTROLLER REQUIREMENTS

THE EXISTING EIGHT-PHASE, FULLY-ACTUATED CONTROLLER HOUSED IN A NEMA "6" BASE MOUNTED CABINET WILL BE USED.

WIRING DIAGRAM



WIRING KEY

- A-B 2-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- C-D 3-CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- E-H VIDEO CABLE
- J STRANDED BARE COPPER GROUND WIRE (NO. 6 A.W.G.)
- K-N MICRO-LOOP PROBE LEAD-IN
- ML MICRO-LOOP PROBE
- EC EXISTING CABLE
- X GROUND ROD

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE FURNISHED BY THE SHA AND INSTALLED BY THE CONTRACTOR

QUANTITY	DESCRIPTION
56 SF	SHEET ALUMINUM SIGNS TO CONSIST OF THE FOLLOWING: SHIELD ASSEMBLY "EAST-US 40-LT. ARROW" (36" X 75")-POLE MOUNTED SHIELD ASSEMBLY "EAST-US 40-RT. ARROW" (24" X 51")-POLE MOUNTED SHIELD ASSEMBLY "WEST-US 40-RT. ARROW" (24" X 51")-POLE MOUNTED SHIELD ASSEMBLY "WEST-US 40-LT. ARROW" (36" X 75")-POLE MOUNTED
1 EA	VIDEO INTERFACE EQUIPMENT - 1-4 CAMERAS
1 EA	LOAD SWITCH

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY CONTRACTOR. ALL EQUIPMENT SHALL HAVE CATALOG CUTS SUBMITTED TO THE OFFICE OF TRAFFIC AND SAFETY FOR APPROVAL PRIOR TO INSTALLATION.

CATEGORY CODE NO.	QUANTITY	DESCRIPTION
203030	1 CY	TEST PIT EXCAVATION
585620	320 LF	FURNISH AND INSTALL 12 IN. WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING
585624	160 LF	FURNISH AND INSTALL 24 IN. WHITE HEAT APPLIED THERMOPLASTIC PAVEMENT MARKING
816005	3 EA	FURNISH AND INSTALL CONTROL CABLE, 250 FT., VIDEO DETECTION CAMERA TO CONTROLLER
816010	1 EA	FURNISH AND INSTALL CONTROL CABLE, 500 FT., VIDEO DETECTION CAMERA TO CONTROLLER
860278	4 EA	FURNISH AND INSTALL 12 IN. PEDESTRIAN SIGNAL HEAD SECTION POLE MOUNTED
860272	43 EA	FURNISH AND INSTALL 12 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION
810555	2 EA	FURNISH AND INSTALL MICRO-LOOP PROBE 1000 FT. LEAD-IN CABLE
810550	2 EA	FURNISH AND INSTALL MICRO-LOOP PROBE 500 FT. LEAD-IN CABLE
818004	1 EA	FURNISH AND INSTALL 10 FT. BREAKAWAY PEDESTAL POLE
865001	2 EA	FURNISH AND INSTALL PUSHBUTTON AND SIGN (PUSH BUTTON TO CROSS US 40)
800000	LS	REMOVE AND DISPOSE OF EXISTING MATERIALS AND EQUIPMENT
816001	4 EA	FURNISH AND INSTALL VIDEO DETECTION CAMERA
801104	1 CY	FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION
802501	40 LF	FURNISH AND INSTALL NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
805150	40 LF	FURNISH AND INSTALL 3 IN. SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED
805160	40 LF	FURNISH AND INSTALL 1 IN. LIQUID TIGHT, FLEXIBLE, NON-METALLIC CONDUIT FOR DETECTOR SLEEVE
811001	1 EA	FURNISH AND INSTALL ELECTRICAL HANDHOLE
837001	1 EA	FURNISH AND INSTALL GROUND ROD 3/4 IN. DIAMETER X 10 FT. LENGTH
861105	300 LF	FURNISH AND INSTALL ELECTRICAL CABLE 2-CONDUCTOR (NO. 14 A.W.G.)
861106	300 LF	FURNISH AND INSTALL ELECTRICAL CABLE 3-CONDUCTOR (NO. 14 A.W.G.)
862102	140 LF	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
813015	56 SF	INSTALL OVERHEAD SIGN

EQUIPMENT LIST "C"

C. EXISTING EQUIPMENT TO BE REMOVED BY THE CONTRACTOR AND DELIVERED TO THE STATE HIGHWAY ADMINISTRATION, 7491 CONNELLEY DRIVE, HANOVER, MARYLAND 21076. THE CONTRACTOR SHALL NOTIFY THE SHA AT (410) 787-7652 AT LEAST THREE DAYS IN ADVANCE OF DELIVERY.

ITEM NO. QUANTITY DESCRIPTION

NONE

ALL SIGNAL EQUIPMENT TO BE REMOVED AND NOT RETURNED TO THE SHA SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

CONTACT PERSONS FOR DISTRICT 4 ARE AS FOLLOWS:

MR. RANDALL SCOTT
ASSISTANT DISTRICT ENGINEER - TRAFFIC
(410) 321-2785/2785

MS. SUENETTE POPE
DISTRICT UTILITY ENGINEER
(410) 321-2841

MR. STEVE MARCISZEWSKI
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
(410) 321-2761

CONTACTS FOR OFFICE OF TRAFFIC AND SAFETY

MR. RICHARD DAFF, SR.
CHIEF, TRAFFIC OPERATIONS
(410) 787-7630

MR. EUGENE BAILEY
TEAM LEADER SIGN OPERATIONS
(410) 787-7676

MR. ROBERT SNYDER
ASSISTANT DIVISION CHIEF,
TRAFFIC OPERATIONS
(410) 787-7631

MS. DARLENE EIDE
SUPPLY OFFICE
SIGNAL SHOP WAREHOUSE
(410) 787-7668

MR. ED RODENHIZER
TEAM LEADER SIGNAL OPERATIONS
(410) 787-7652

PHASING CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
PHASE 1 & 5	←G→	←G→	R	R	←G→	←G→	R	R	R	R	R	R	R	R	DW	DW
1 & 5 CHANGE	←G→	←G→	G	G	←R→	←R→	R	R	R	R	R	R	R	R	DW	DW
PHASE 1 & 6	←Y→	←Y→	Y	Y	←R→	←R→	R	R	R	R	R	R	R	R	DW	DW
1 & 6 CHANGE	←Y→	←Y→	G	G	←R→	←R→	R	R	R	R	R	R	R	R	DW	DW
PHASE 2 & 5	←R→	←R→	R	R	←G→	←G→	G	G	R	R	R	R	R	R	DW	DW
2 & 5 CHANGE	←R→	←R→	G	G	←Y→	←Y→	Y	Y	R	R	R	R	R	R	DW	DW
PHASE 2 & 6	←R→	←R→	R	R	←G→	←G→	G	G	R	R	R	R	R	R	DW	DW
2 & 6 CHANGE	←R→	←R→	G	G	←Y→	←Y→	Y	Y	R	R	R	R	R	R	DW	DW
PHASE 3	←R→	←R→	R	R	←R→	←R→	R	R	←G→	←G→	G	G	R	R	DW	DW
3 CHANGE	←R→	←R→	R	R	←R→	←R→	R	R	Y	Y	Y	Y	R	R	DW	DW
PHASE 4	←R→	←R→	R	R	←R→	←R→	R	R	R	R	R	←G→	←G→	G	DW	DW
4 CHANGE	←R→	←R→	R	R	←R→	←R→	R	R	R	R	R	Y	Y	Y	DW	DW
PHASE 4 ALT	←R→	←R→	R	R	←R→	←R→	R	R	R	R	R	←G→	←G→	G	FL-WK	FL-WK
PED CLEAR	←R→	←R→	R	R	←R→	←R→	R	R	R	R	R	←G→	←G→	G	FL-DW	FL-DW
4 ALT CHANGE	←R→	←R→	R	R	←R→	←R→	R	R	R	R	R	Y	Y	Y	DW	DW
FLASHING OPERATION	←FLR→	←FLR→	FLR	FLY	←FLR→	←FLR→	FLY	FLY	FLR	FLR	FLR	FLR	FLR	FLR	DARK	DARK

SG-04



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION

Office of Traffic & Safety

TRAFFIC ENGINEERING DESIGN DIVISION

GENERAL INFORMATION SHEET

US 40 AND WOODBRIDGE CENTER WAY /
BUSINESS CENTER WAY

DRAWN BY: T. ZAYDEL
CHECKED BY: K. SCHMID
SCALE: NONE
DATE: 2-18-05

F.A.P. NO. NA
S.H.A. NO. NA
COUNTY: HARFORD
LOG MILE: 120040002.66

TS NO. 2358F GI
T.I.M.S. NO. G897

SHEET NO.

49 OF 100

TRAFFIC CONCEPTS, INC.
325 Gambrills Road
Suite E
Gambrills, MD 21054
(410) 923-7101

FAX (410) 923-6473 EMAIL TRAICONCEPT@AOL.COM

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